

Serial No.: 09/579,736

RCA 90,200

**Listing and Amendments to the Claims**

Please amend claims 1, 8, 14 and 17 as indicated:

1. (Currently Amended) An apparatus for reading from or writing to optical recording media, comprising:  
a photodetector with at least two detector elements;  
a phase forming unit for detecting a phase difference between output signals of the photodetector;  
an edge sequence detector for detecting a sequence of edges of the output signals; and  
a signal blocking unit for blocking an output signal of the phase forming unit when an impermissible sequence of edges is detected.

2. (Previously Presented) The apparatus according to Claim 1, wherein the signal blocking unit blocks a signal which is derived from the output signal of the phase forming unit or is used to form the output signal.

3. (Previously Presented) The apparatus according to Claim 2, further comprising diagonal summation signal forming units having inputs connected to the detector elements of the photodetector and providing the output signal.

4. (Previously Presented) The apparatus according to Claim 3, further comprising edge detectors and phase angle detectors, to which the output signals are fed and whose outputs are connected to the phase forming unit and to the edge sequence detector.

5. (Previously Presented) The apparatus according to Claim 2, further comprising edge detectors and phase angle detectors, to which the output

Serial No.: 09/579,736

RCA 90,200

signals are fed and whose outputs are connected to the phase forming units and to the edge sequence detector.

6. (Previously Presented) The apparatus according to Claim 1, further comprising diagonal summation signal forming units having inputs connected to the detector elements of the photodetector and providing the output signal.

7. (Previously Presented) The apparatus according to Claim 1, further comprising edge detectors and phase angle detectors, to which the output signals are fed and whose outputs are connected to the phase forming unit and to the edge sequence detector.

8. (Currently Amended) The apparatus according to ~~one of~~ Claim 1, wherein the phase forming unit and the edge sequence detector are integrated.

9. (Previously Presented) The apparatus according to Claim 1, further comprising a fault indicator connected to an output of the edge sequence detector.

10. (Previously Presented) A method for determining a correct track error signal utilizing a phase detection method, comprising the steps of:

> checking a sequence of zero crossings whose phases are detected with regard to impermissible sequences; and  
preventing the outputting of a phase value when an impermissible sequence is detected.

11. (Previously Presented) The method of Claim 10, wherein a sequence of more than two successive zero crossings of one of the signals without the occurrence of a zero crossing in another of the signals is an impermissible sequence.

Serial No.: 09/579,736

RCA 90,200

12. (Previously Presented) The method of Claim 10, wherein a sequence of more than one pair of zero crossings within a predetermined time period, a pair of zero crossings consisting of a zero crossing of one of the signals and a succeeding zero crossing of another one of the signals, is an impermissible sequence.

13. (Previously Presented) The method of Claim 10, wherein an error indication signal is generated as a function of the accumulation of impermissible sequences.

14. (Currently Amended) The method of ~~Claims~~ Claim 10, wherein the signals are evaluated in a predetermined clock cycle, a zero crossing being present if one of two successive values of the signal lies above, and the other of said values lies below, a reference value, and the temporal positions of the zero crossing is interpolated using these two values.

15. (Previously Presented) The method of Claim 14, wherein the phase value between a zero crossing of one signal of the signals and a zero crossing of another of the signals is determined from the respective interpolated temporal position and the number of clock cycles lying between the zero crossings.

16. (Previously Presented) The method of Claim 10, further comprising the step of extrapolating the track error signal in the event of an impermissible sequence.

17. (Currently Amended) The method of Claim 10, wherein the phase detection method is the a differential phase detection method, the signals to be compared being the diagonal summation signals.